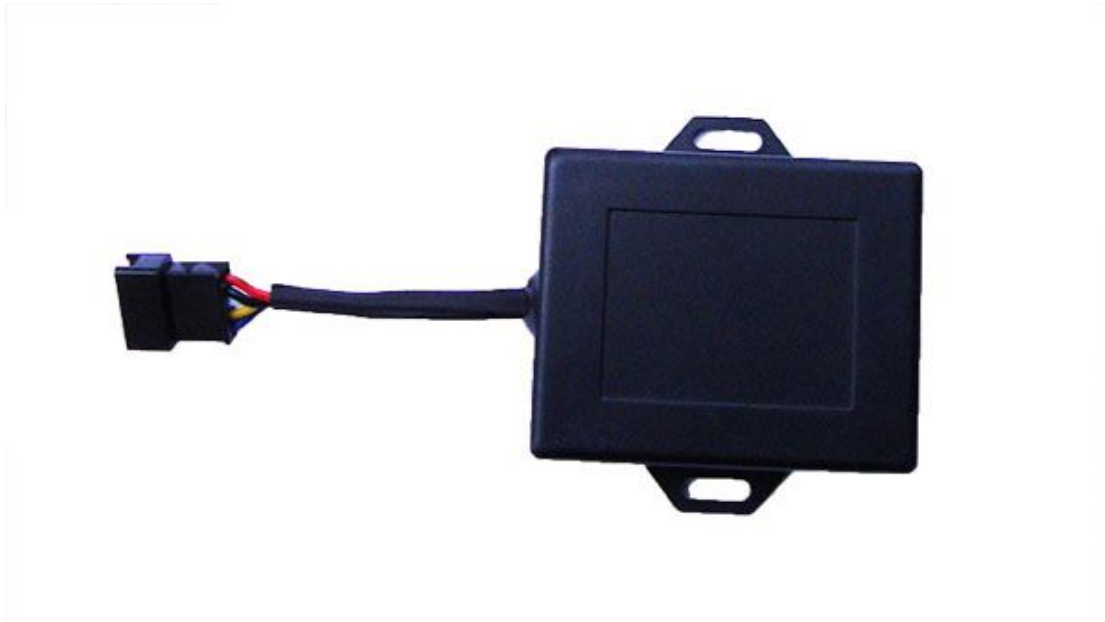


# GPS Vehicle Tracker

User Manual (Model: MT08)



Please Read Carefully Before Operation



Security of Rental Car



Monitoring of Public Conveyance



Ambulance assignment



Cargo Logistic Assignment



Taxi Assignment



Security of the Outdoor Activities



Fleet Management

## Contents

1. Product Overview-----	4
2. Applications-----	4
3. Features and Functions-----	4
4. Specifications-----	5
5. First Use-----	5
5.1 Install SIM Card-----	5
5.2 Charging-----	6
5.3 LED indications-----	6
6. Connect the tracker MT08 to GPRS01 Web Server Platform-----	6
Optional 1: Configure by Computer to set GPS tracker online-----	6
Optional 2: SMS Commands to set GPS tracker online-----	11
Settings on Topshine GPRS01 Platform-----	12
① Login Topshine GPRS01 Platform-----	12
② Vehicle Information Management-----	12
③ Set up information for a new group-----	12
④ Set up information for a new vehicle-----	14
7. Installation-----	16
7.1 Install I/O Cable-----	16
7.2 Power/GND-----	16
7.3 Digital Input-----	17
7.4 Output 1-----	17
7.5 Install GPS/GSM Antenna-----	18
8. How to operate it-----	18
8.1 Arm/Disarm by phone calling-----	18
8.2 Arm/Disarm the system via SMS-----	18
8.3 Get Google Map's Link via SMS-----	19
8.4 Authorize the alarm-received mobile-----	19
8.5 Change user password-----	19
8.6 Check the real physical address-----	19
8.7 Check the GPS coordinates by SMS-----	20
8.8 Stop the car via SMS-----	20
8.9 Restore the stopped car to normal status-----	20
9. MT08 Packing and Accessories-----	20
10. MT08 Optional Accessories-----	20
11. Troubleshooting-----	21
Appendix 1: Configure by Computer-----	22
Appendix 2: Command List-----	23
Appendix 3: Fuel Sensor Installation and Function-----	29

## 1. Product Overview

MT08 is a kind of mini GPS vehicle tracking product can be used for tracking and security of motorcycle and automobile etc. Mini size, built-in antenna and waterproof designed, easy to be installed and concealed, with power voltage range from 6V~24V, therefore can satisfy tracking and security demands for all kinds of vehicles.

## 2. Applications

- Vehicle Real Time Tracking
- Motorcycle/car Security/Anti-Hijack
- Fleet Management

## 3. Features & Functions

- \* Tracking by SMS/GPRS (TCP/UDP)
- \* Tracking by time/distance interval
- \* Compact size with waterproof design
- \* Real time tracking via the web-platform
- \* Get position location via call/SMS
- \* Arm/Disarm by SMS or phone call
- \* Engine on/off detection (optional)
- \* Fuel monitoring (optional)
- \* Built-in backup 350 mAh battery
- \* Remote Engine cut off to stop the car in safe condition (optional)
- \* Get location physical name via SMS & from the web-platform
- \* Google Map link for location via SMS, it shows your location on map via mobile phone.
- \* Mileage calculation with longitude and latitude via SMS; view mileage data via GPS web-based tracking centre system
- \* Built-in motion sensor for power & GPRS flow saving mode (sleep mode)
- \* I/O: 2 Inputs, 1 Output
- \* Over speed alert
- \* Geo-fence alert
- \* Movement alert
- \* Doors detection (optional)
- \* Power failure/low power alert
- \* SOS Panic button, SOS alert (optional)
- \* Accident alarm (need crash sensor support) (optional)
- \* Wiretapping/remote listening (optional)

## 4. Specifications

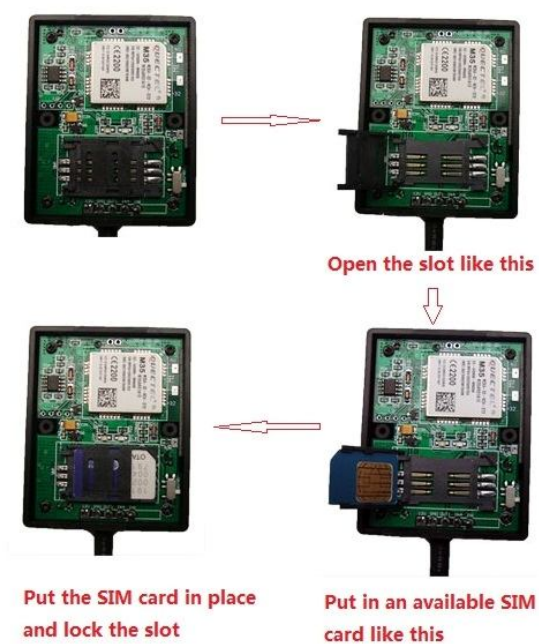
Items	Specifications
Dimension	60*50*22mm
Weight	65g
Input voltage	DC 9V~24V/1.5A
Back-up Battery	350mAh/3.7V
Power Consumption	65mA standby current
Operating Temperature	-20°C~75°C
Humidity	5%~95%
Work Time	18 hours in power-saving mode and 4 hours in normal mode
LED	2 LED lights to show GPS, GSM status
Button	1 SOS(optional) and 1 power on/off
Microphone	Optional
Sensor	Motion sensor
GSM Frequency	GSM 850/900/1800/1900MHz
GPS Chip	Latest GPS SIRF-Star III Chipset
GPS Sensitivity	-159dB
Positioning Accuracy	10meters, 2D RMS
I/O	2 Inputs                      1 Output

## 5. First Use

### 5.1 Install SIM Card

Check that the SIM has not run out of credit (test the SIM in a phone to make sure it can send and receive SMS);

Before installing the SIM card, turn off the power for MT08, then install the SIM card as following:

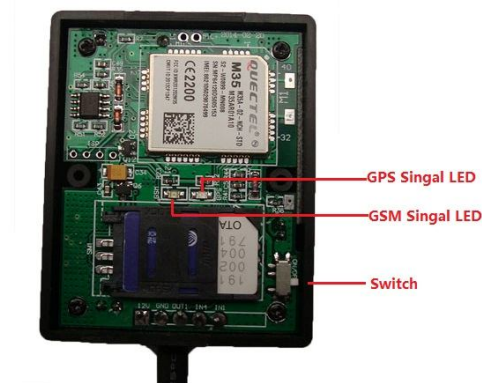


### 5.2 Charging

Connect the device with external power like car battery, and turn on its power switch and it will do charging automatically.

### 5.3 LED indications

Push the power switch to turn on/off MT08



GPS LED (Red)	
Flashing (every 0.1 second)	Initializing or back-up battery power is low
Flashing (0.1 second on and 2.9 seconds off)	Device has A GPS fix
Flashing (1 second on and 2 seconds off)	Device has no GPS fix
GSM LED (Green)	
Flashing (every 0.1 second)	Initializing
Flashing (0.1 second on and 2.9 seconds off)	Device is connected to the GSM network
Flashing (1 second on and 2 seconds off)	Device is not connected to the GSM network

## 6. Connect the tracker MT08 to GPRS01 Web Server Platform

Two Methods to set GPS tracker online:

Configure by Computer or SMS Commands

### Optional 1: Configure by Computer to set GPS tracker online

This part shows the basics of how to use the GPS tracker Parameter Editor.

Note: Don't connect MT08 to external battery when configuring.

How to Edit the Parameters of Tracker on PC

- ① (Buy one specific USB cable for configuration from our Company)



## ② Install USB driver program for the configuration USB cable

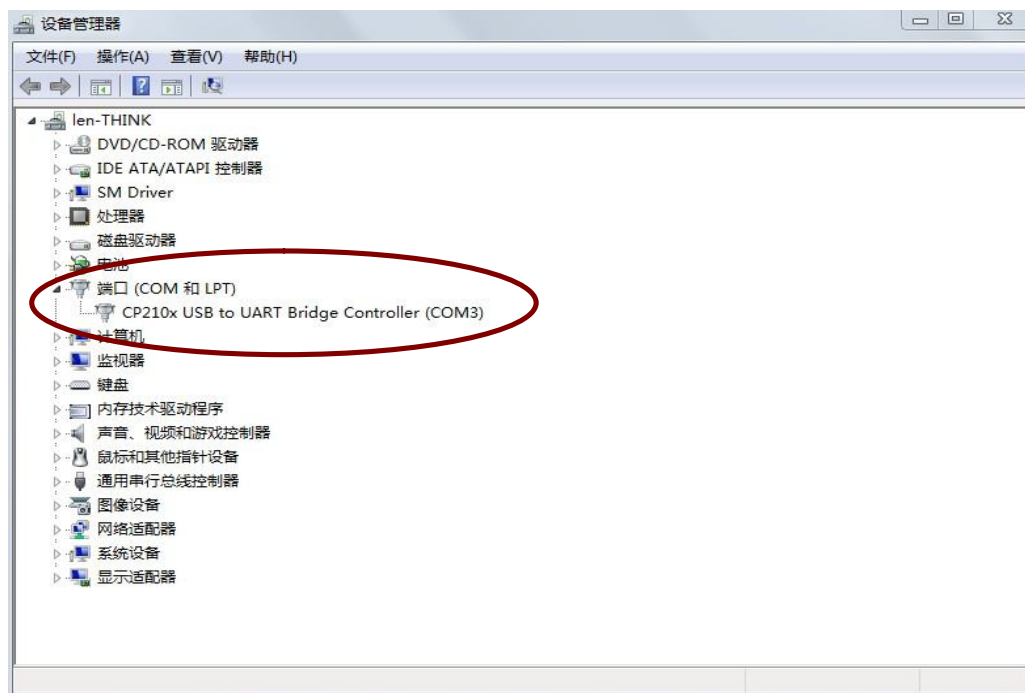
1. Run 'CP210x\_Prolific\_DriverInstaller' to install the driver for the USB data cable.

Note: CP210x\_Prolific\_DriverInstaller is in the folder 'USB-232 Driver' in the CD. Connect the USB Data Cable between MT08 and PC.



2. Connect the configuration cable with PC, open device management of your computer, you can find "Prolific USB-to-Serial Comm. Port", as following picture shows.

The USB port is virtual comm. Port (com3) in this example,



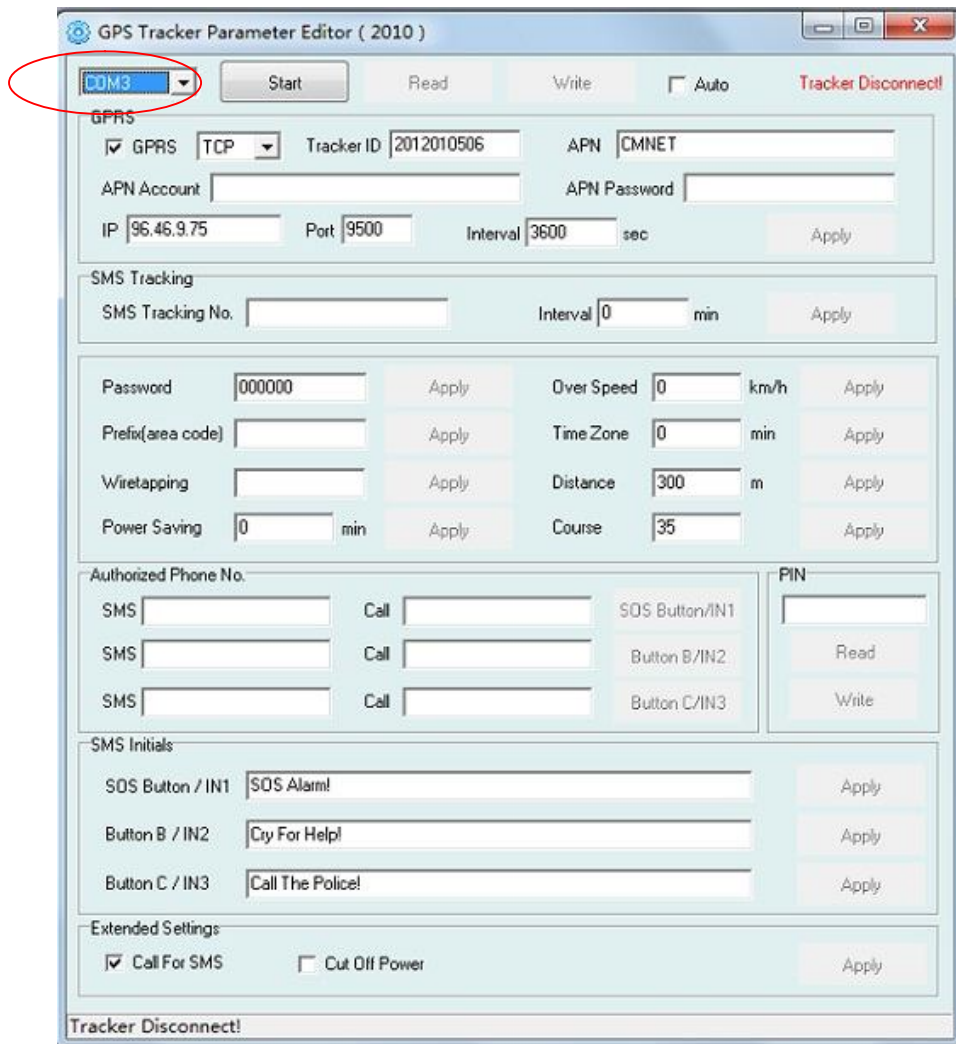
## 3. Open the GPS Tracker Parameter Editor

① Connect MT08 with PC by the configuration cable

② Confirm MT08 is in the Power Off states

③ Double click GPS Tracker Parameter Editor.exe and Select the COM Port, following picture shows:





4. Click Start button to open the COM port,

5. Turn on MT08 and it will connect with the Editor automatic, As soon as they connect successful, all the buttons are availability and the status bar will clue on 'Tracker Connect!' , first click "Read" to read the tracker's parameter, when all the parameter read out, you can write the parameter you need.

Note: "Read" button: when you click the Read button, it means Read the parameters of the tracker.

"Write" button: when you write the parameters to the Parameter Editor, then click the Write button, the parameters will write into the tracker.



GPS Tracker Parameter Editor ( 2010 )

COM3 Close Read Write ☐ Auto Tracker Connect!

**GPRS**

☒ GPRS TCP Tracker ID 2012010506 APN CMNET

APN Account  APN Password

IP 96.46.9.75 Port 9500 Interval 3600 sec Apply

**SMS Tracking**

SMS Tracking No.  Interval 0 min Apply

Password 000000 Apply Over Speed 0 km/h Apply

Prefix(area code)  Apply Time Zone 0 min Apply

Wiretapping  Apply Distance 300 m Apply

Power Saving 0 min Apply Course 35 Apply

**Authorized Phone No.**

SMS  Call  SOS Button/IN1

SMS  Call  Button B/IN2  Read

SMS  Call  Button C/IN3  Write

**PIN**

**SMS Initials**

SOS Button / IN1 SOS Alarm! Apply

Button B / IN2 Cry For Help! Apply

Button C / IN3 Call The Police! Apply

**Extended Settings**

☒ Call For SMS ☐ Cut Off Power Apply

Tracker Connect!

Instruction of parameter settings:

**GPRS**

☒ GPRS TCP Tracker ID 2012010506 APN CMNET

APN Account  APN Password

IP 96.46.9.75 Port 9500 Interval 3600 sec Apply

Item	Description
GPRS	Tick to enable GPRS function, select TCP or UDP mode
Tracker ID	MT08 is default using its own ID number, cannot be changed
APN, APN Account, APN Password	Put your local APN, APN username and password if necessary
IP, Port	Put online tracking server IP and port, our default is IP: <a href="http://www.global-track.net">www.global-track.net</a> port: 9500
Interval	Time interval, to put time interval to upload a data

Note: GPRS, Tracker ID, IP, Port is the default. You must change the APN;

APN: Access Point Name, if you don't know, please ask SIM operator or search APN in Google.

Authorized Phone No.			PIN	
SMS	Call	SOS Button/IN1	<input type="text"/> <input type="button" value="Read"/> <input type="button" value="Write"/>	
SMS	Call	Button B/IN2		
SMS	Call	Button C/IN3		

Item	Description
SMS Call SOS Button/IN1	To set Mobile phone No. for SMS or Calling when SOS button/Input 1 is triggered (alarm), it will call/SMS to this phone
SMS Call Button B/IN2	To set Mobile phone No. for SMS or Calling when Button B/Input 2 is triggered (alarm), it will call/SMS to this phone
SMS Call Button C/IN3	To set Mobile phone No. for SMS or Calling when Button C/Input 3 is triggered (alarm), it will call/SMS to this phone

After write finished, click “Write” button to configure the MT08’s Parameters. It will pop-up a mini window, as below pictures:

GPS Tracker Parameter Editor ( 2010 ) V2.65

COM5 Close Read Write Auto Tracker Connect!

**GPRS**

☒ GPRS TCP Tracker ID 2013112014 APN internet

APN Account APN Password

IP 122.176.98.229 Port 7777 Interval 20 sec Apply

**SMS Tracking**

SMS Tracking No. Interval 0 min Apply

Password 000000 Apply Over Speed 0 km/h Apply

Prefix(area code) Apply Time Zone 0 min Apply

Wiretapping 0 m Apply

Power Saving 0 min Apply

**Authorized Phone No.**

SMS Call SOS Button/IN1

SMS Call Button B/IN2

SMS Call Button C/IN3

**SMS Initials**

SOS Button / IN1 IN1 Alarm! Apply

Button B / IN2 IN2 Alarm! Apply

Button C / IN3 IN3 Alarm! Apply

**Extended Settings**

☒ Call For SMS ☒ Cut Off Power Apply

Write Data Success!

**Parameter**

COM Operate Success!

OK

Please click “Read” button again, confirm your write parameter.

When you finished the GPS Tracker Parameter Editor, then turn off the tracker, pull up the USB cable.

Note: Please remember the tracker ID, in order to set up on the platform.

More about configure by computer, please check Appendix 1

### Optional 2: SMS Commands to set GPS Tracker online

#### ① Set ID by SMS

Command: W000000,010,ID

Description: every tracker has a unique ID. Tracker ID must be less than 14 digitals. But model MT08 is default using its own ID number, cannot be changed.

#### ② Set APN by SMS

Command: W000000,011,APN,APN name, APN password

Description: APN name, APN username, APN password

If no password required, just put in APN name only.

#### ③ Set IP Address and Port by SMS

Description: IP address is 210.209.68.180 Port is 9500

SMS command: W<password>,012,<IP>,<port>

Example:

SMS send: W000000,012, 210.209.68.180,9500

We support domain name instead of IP address:

Example: W000000,012,www.global-track.net,9500

#### ④ Enable GPRS Function

Command: W<password>,013,X

Description: X=0,close GPRS(Default)

X=1,enable TCP

X=2,enable UDP

#### ⑤ Set Time Interval for Sending GPRS Packet

Command: W<password>,014,XXXXXX

Description: XXXXXX should be in five digitals and in unit of 10 seconds.

XXXXXX =00000, to disable this function

XXXXXX =00001~65535, time interval for sending GPRS packet and in unit of 10 seconds

Note: More GPRS01 Platform functions, please check manual of Operation Instruction of Topshine web-based tracking platform GPRS01.

### Next Step: Settings on Topshine GPRS01 Platform

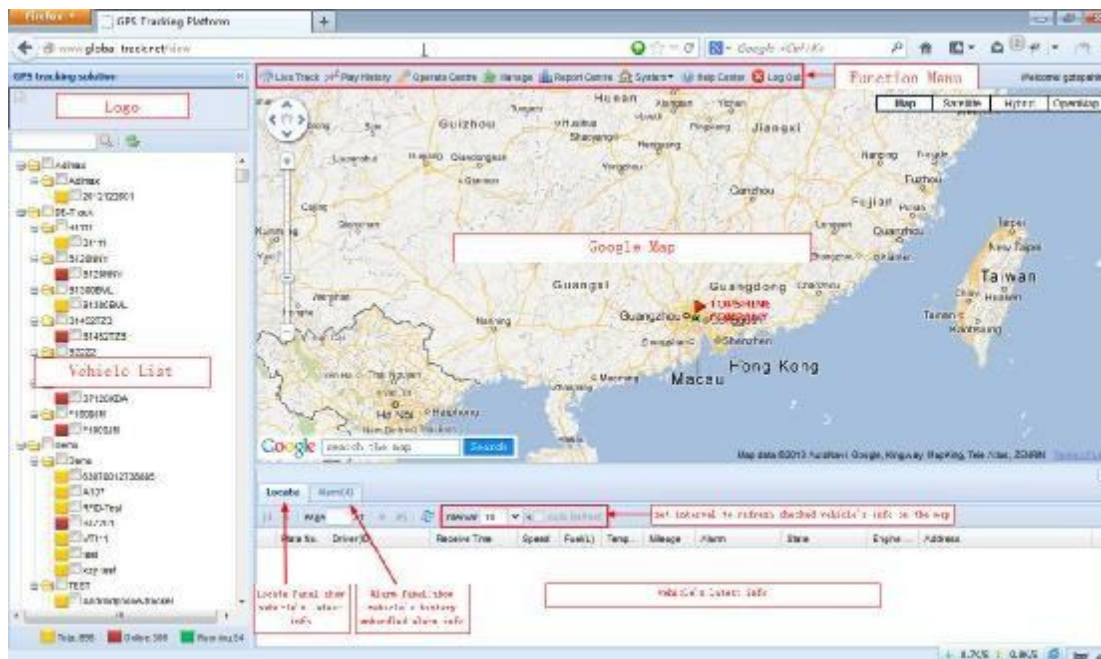
Turn on the tracker MT08, when it normal working (find the GSM & GPS signal),

#### ① Login Topshine GPRS01 Platform

Website: [www.global-track.net](http://www.global-track.net)

User Name: \*\*\*

Password: \*\*\*



Note: Red box means the vehicle Online;

Yellow box means the vehicle offline;

Green box means the vehicle running.

#### ② Vehicle Information Management

Centralized management of all vehicles in the platform, the “Kind, GPRS ID, Plate No.” are mandatory terms, and the **GPRS ID** must be consistent with the **tracker ID**.

Set up a new group and new vehicle information. For example,


Group name: demo123

Username: demo123 (can be set different from group name)

Password: 123

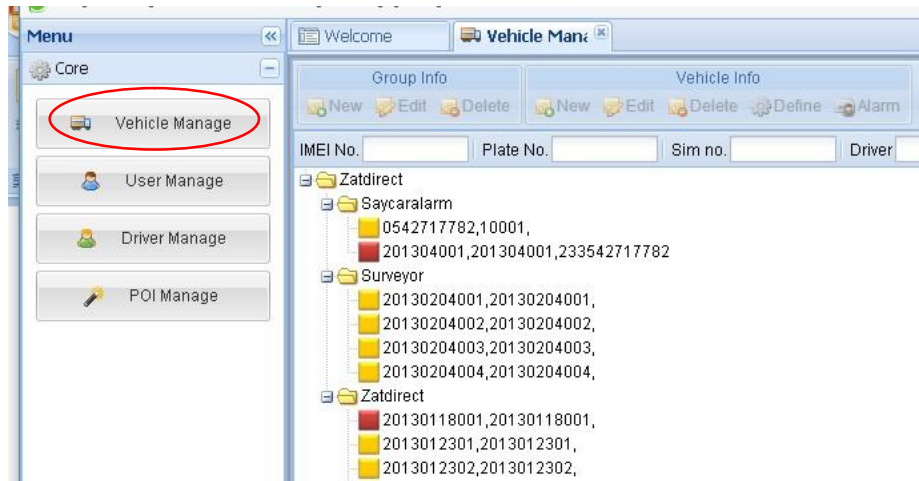
Vehicle name: Benz2012

#### ③ Set up information for a new group e.g. ‘demo123’

Click picture 1 “manage”  and then click the picture 2, “Vehicle Manage.”



Picture 1

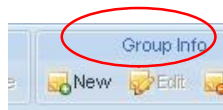


Picture 2

Click the company name, e.g.  in picture below:



Click  in , then you can see picture below:



**New Group**

Group Name:  
demo123

Company Name:  
Demo

Person:

Tel:

Email:


Address:

MapInfo:  
Open Street Map(Free)

Save

Input 'demo123' in the blank of Group Name

Group Name:  
demo123

Click , then group 'demo123' is ready as below:

IMEI No.  Plate No.  Sim no.  Driver

Zatdirect

Demo 123

#### ④ Set up information for a new vehicle e.g. 'Benz123'

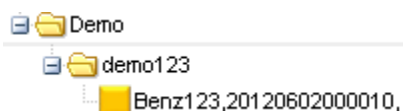
Click the group name , and click  in , then you can see picture below:

Vehicle Info

New Edit Delete



Input the correct Kind, GPRS ID and Plate No. and Customize Mark etc. necessary information, click **Save**, then you can see group 'demo123' and vehicle 'Benz123' with tracker ID 2012060200010 have been set ready as below.



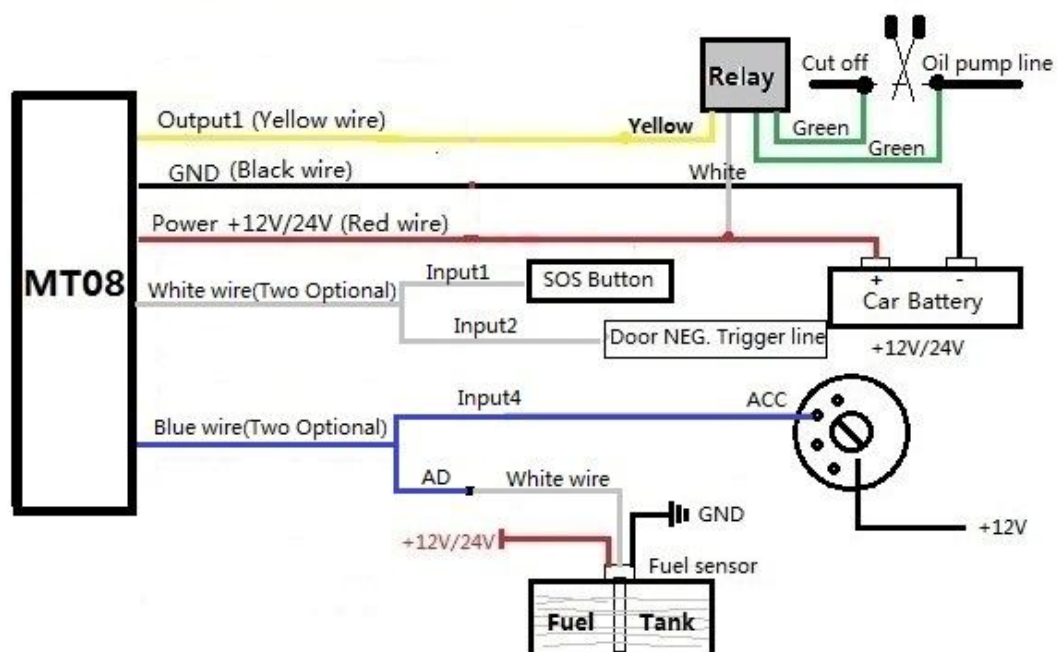
Once again into the main interface, select the little red box, you will see the tracker location. Such as following picture:



## 6. Installation

- Please select experienced technicians to install this system.
- The installation should be carried in the working condition for this system.
- Install this system in a secret place.
- Prevent this system from dust and humidity.
- Connect the wires of the mainframe. The Relay can control oil pump wire or electric wire (ACC). It suggested connecting it to oil pump wire.
- Connect the wires of other wires, leave the plug unplugged.
- Fixing, wiring connecting, binding should be carried on carefully.

Installation Diagram



### 6.1 5-p wires I/O instruction



PIN Number	Color	Description
Input 1/Input 2	White wire	Digital Input 1 (negative triggering), E.g. connect SOS panic button or door detection
Input 4/AD	Blue wire	Digital Input 4 (positive triggering), e.g. detecting the ACC or fuel monitoring
Output 1	Yellow wire	Output1. It can be used to connect with relay for engine immobilization.
GND	Black wire	Ground, Negative
POWER	Red wire	DC in (power source). Input voltage: 9V-24V, 12V suggested.

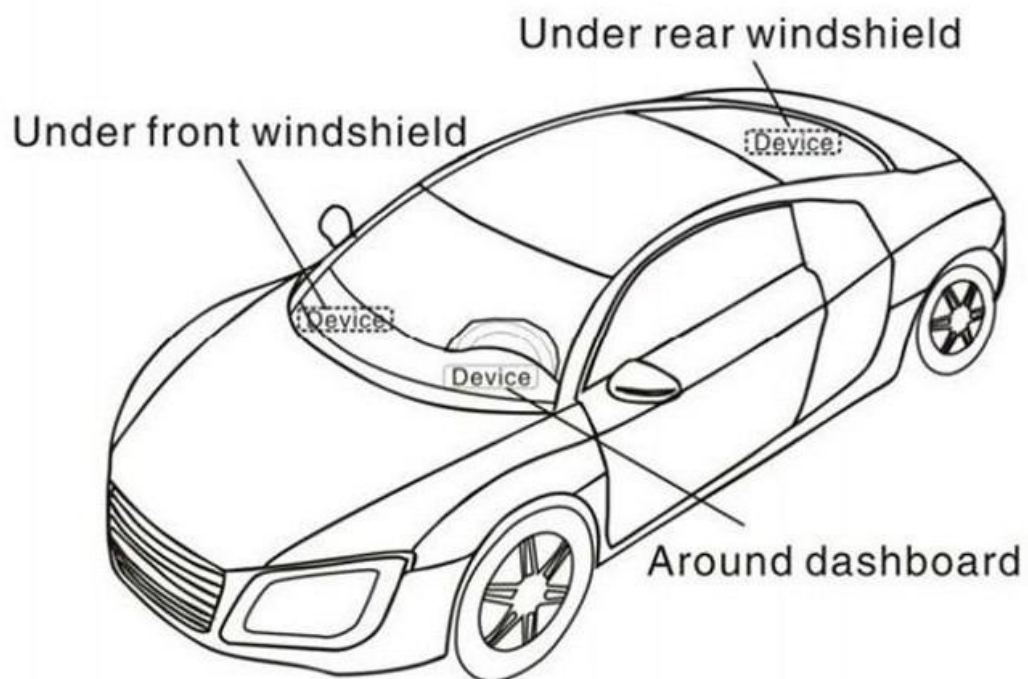
### 6.2 Install GPS/GSM Antenna

GSM & GPS are built-in antenna, do not need to install.

Note: Do not shield or cover the GPS Antenna with any objects containing metal

### 6.3 Recommended install place

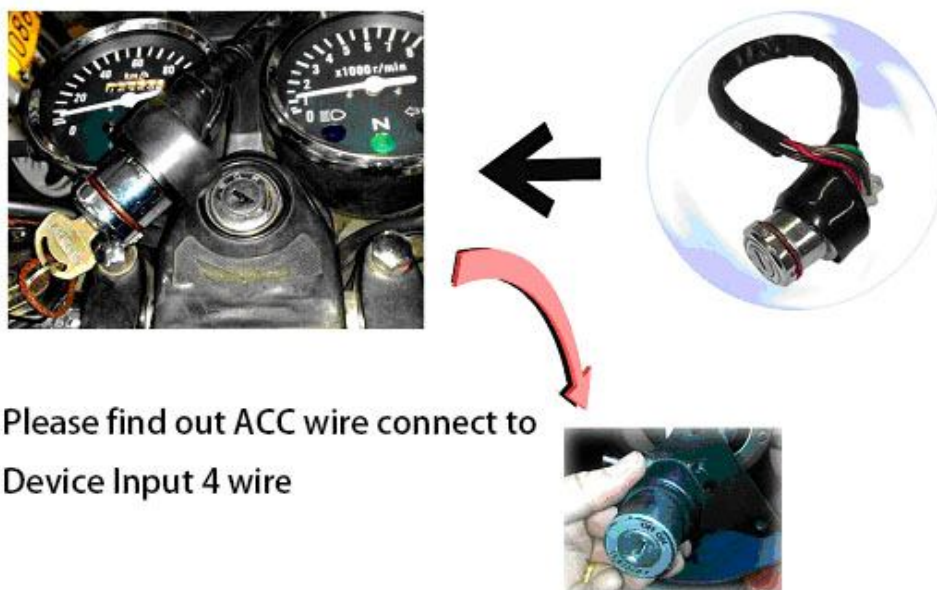
**For automobile:**



**For Motorcycle:**



Please let device positive (red wire) is connected to the battery's positive (red wire), device negative (black wire) is connected to the battery negative (black wire).



## 8. How to operate it:

Note:

① The default password is 000000, you should change the password when use the device.

Change user's password: W000000,001,\*\*\*\*\*

(000000 is old password; \*\*\*\*\*is new password)

② Command Letter must be capital letters.

### 8.1 Arm / Disarm by phone calling

User could also use the alarm-received mobile phone to call the tracker's SIM card number, so as to Arm/Disarm the system.

**Arm:** After hearing several ring tones, if the system hangs up the call automatically, and call back you, it means that the system is armed.

**Disarm:** After hearing several ting tones, if the system hangs up the call automatically, and don't call back you, it means that the system is disarmed.

Note:

(1) There is no communication fee for this operation, it is a very convenient way to arm & disarm the system.

(2) The SIM card inside the device must have the function of caller ID display.

(3) Only the Alarm-received mobile phone can realize this function.

### 8.2 Arm / Disarm the system by SMS

SMS command: **000000ARM**

This SMS instruction is used to arm the system;

When the system is armed, the movement alert is activated automatically. When the motorcycle / car moves, the alarm will be triggered.

SMS command: **000000DSM**

This command is used to disarm the system & stop sending alert SMS.

### 8.3 Check the location by Google map's URL

SMS command: **000000MAP**

Upon receiving the SMS command, the tracker will automatically send back the SMS including the Google map's URL, user can use a smart phone (GPRS data service is enabled) to open the URL, the car's location will be showed on the Google map.



### 8.4 Authorize the alarm-received mobile

SMS command: **W\*\*\*\*\* ,003,F,P,<Mobile number>**

\*\*\*\*\* is the user password, default one is 000000.

(F=0, to turn off this function; F=1, to send alert SMS)

(P=1, the first phone; P=2, the second phone; P=3, the third phone)

In case of alert, the alarm SMS will be sent to this preset mobile number automatically.

Example: W000000,003,1,1,13800138000 to the tracker's SIM card number, if there is any alert, system will send alert SMS to the first mobile 13800138000

### 8.5 Change user password

SMS command: **W<000000>,001,#####**

<000000> is old password, ##### is new password, default one is 000000

The length of the user's password is 6 digits. Users are suggested to change to the new password in use.

Example: W000000,001,123456

### 8.6 Check the real physical address

SMS command: **000000ADD**

When user sends this SMS command to the tracker, the tracker will automatically send back the car's real physical address (such as city name, street name) to your mobile by SMS. There is no need for the user to setup any server, but it needs supports from our GPRS01 server.

Remark:

- (1) The GPRS data service of the tracker's SIM card must be activated, and the correct GPRS setting is needed (refer to the chapter of the setting of GPRS connection), user can



set up the GPRS upload time interval to 0 so as to save the GPRS flow;

- (2) The physical address depends on the Google map's address information. If the place has very detailed information on Google map, then the physical address by SMS is very detailed.

#### 8.7 Check the GPS coordinates by SMS

SMS command: **000000CHK**

This instruction is used to inquiry the vehicle's location & system's status. The system will send back the SMS, includes the similar information, such as "System is Armed..."

#### 8.8 Stop the car by SMS

SMS command: **000000STP**

This instruction is used to cut off the power supply or fuel supply so as to stop the motorcycle/car immediately.

Attention: It is very dangerous to stop the car when the vehicle is running at high speed. We do not take any responsibility to the consequence caused by this action.



#### 8.9 Restore the stopped car to normal status

SMS command: **000000RES**

This instruction is used to restore the car to normal status after stopping the car.

Note: More SMS Commands, please check Appendix 2: Command List

### 9. MT08 Packing and Accessories

Accessories	QTY	IMAGE	FUNCTION
Main unit	1 piece		MT08's function
5 PIN wire	1 piece		Mainly used to connect to the vehicle

### 10. MT08 Optional Accessories

Optional Accessories	Image	Function
Relay		To cut-off/restore the power/fuel supply



USB Configure Cable		Configure tracker's parameter  Upgrading the tracker's firmware
---------------------	---	---

## 11. Troubleshooting

Problem: Unit will not turn on	
Possible Cause:	Resolution:
Wiring was not connected properly	Check and make sure wiring connection is in order.
Battery needs charging	Recharge battery
Problem: Unit will not respond to SMS	
Possible Cause:	Resolution:
GSM antenna was not installed properly	Make MT08 connected to GSM network.
GSM Network is slow	Wait for SMS. Some GSM networks slow down during peak times or when they have equipment problems.
Unit is sleeping	Cancel sleeping mode
Wrong password in your SMS	Insert the correct password
The SIM in MT08 has run out of credit	Replace or top up the SIM card
No SIM card	Insert working SIM card. Check in phone that the SIM can send SMS messages.
SIM card has expired	Check in phone that the SIM can send SMS messages. Replace SIM card if needed.
SIM has PIN code set	Remove PIN code by inserting SIM in you phone and deleting the code
SIM is warped or damaged	Inspect SIM, clean the contacts. If re-inserting does not help try another to see if it will work.
Roaming not enabled	If you are in a different country your SIM account must have roaming enabled
Battery is low	Recharge the unit and the GSM will start working.
Problem: SMS from MT08 states 'Last.....'	
Possible Cause:	Resolution:
Unit does not have clear view of the sky	Move the antenna of the unit to a location where the sky is visible.

MT08 is in an inner place

Wait for the target to come out

## Appendix 1 Configure by computer

The screenshot shows the 'SMS Tracking' configuration window. It includes the following fields and buttons:

- SMS Tracking No.:** [Empty field] [Apply]
- Interval:** [0] min [Apply]
- Password:** [000000] [Apply]
- Over Speed:** [0] km/h [Apply]
- Prefix(area code):** [Empty field] [Apply]
- Time Zone:** [0] min [Apply]
- Wiretapping:** [Empty field] [Apply]
- Distance:** [300] m [Apply]
- Power Saving:** [0] min [Apply]
- Course:** [35] [Apply]

Item	Description
SMS tracking No. Interval	To put a mobile phone number for automatic tracking by SMS at certain time interval in minutes
Password	To set SMS command password, the default is 000000,
Over Speed	To set speed limit for over speed alarm
Prefix(area code)	To set country code
Time Zone	To set time zone, GMT*60 (minutes), if in west half western hemisphere, “-” is necessary to put ahead
Wiretapping	To set wiretapping mobile phone number
Distance	To set track and upload data by certain distance in meters
Power Saving	To set time enter into standby mode when shaking not detected to save power and GPRS data traffic
Course	To set upload data via angle shifting by certain angles

The screenshot shows the 'SMS Initials' configuration window. It includes the following fields and buttons:

- SOS Button / IN1:** [SOS Alarm!] [Apply]
- Button B / IN2:** [Cry For Help!] [Apply]
- Button C / IN3:** [Call The Police!] [Apply]

SOS Button/IN1	To customize the reply SMS text when SOS Button/Input1 triggered
Button B/IN2	To customize the reply SMS text when Button B/Input 2 triggered
Button C/IN3	To customize the reply SMS text when Button C/Input 3 triggered



Call for SMS	Tick it to reply SMS when calling in
Cut off Power	Tick it to send alert when the external power be cut off

## Appendix 2: Command List

Description	Command	Remarks
Get current location	W*****,000	Get current location of MT08
Get location in Google map URL format via SMS	W*****,100	<a href="http://maps.google.com/maps?f=q&amp;hl=en&amp;q=22.542563,114.077971&amp;ie=UTF8&amp;z=16&amp;iwloc=addr&amp;om=1">http://maps.google.com/maps?f=q&amp;hl=en&amp;q=22.542563,114.077971&amp;ie=UTF8&amp;z=16&amp;iwloc=addr&amp;om=1</a>
Change user's password	W*****,001,#####	***** is old password ##### is new password
Set interval for automatic timed reports	W*****,002,XXX	XXX is the interval in minute. If XXX=000 it will stop tracking
Set preset phone number for SOS button	W*****,003,F,P,T1,T2	F=0, to disable this function; F=1, only sending SMS; F=2, only calling preset phone number; F=3, both SMS and calling (default) P is the button number and should be 1, or 2, or 3. If SOS button is linked to IN1, then P=1. T: Preset phone number (T must be less than 16 digits) T1: When no T2, T1 for short message number or dial the number; when have T2, T1 for message number. T2: for dial the number.
Set over speed alarm When MT08 speeds higher than the preset value, it will send one over speed alarm SMS to the SOS preset number.	W*****,005,XX	XX (the speed preset value) =00 , disable =[01<XX<20] (unit: 10Km)
Set Geo-fence alarm (foursquare)	W*****,006,XX	XX (set distance from current central point place )

When the MT08 moves out of preset scope, it will send one Geo-fence SMS to the SOS preset number.		=00, disable =01, 30m =02, 50m =03, 100m =04, 200m =05, 300m =06, 500m =07, 1000m =08, 2000m
Extend Settings	W*****,008,ABCDEF GHIJ###	A=0, disable position report function when a call is made to MT08 A=1, enable position report function to get position SMS by Calling MT08 I=0, disable power failure alert I=1, enable power failure alert The functions of BCDEFGHJ are remained for further use. ### is the ending character.
Set Geo-fence alarm  017 command is for alarm when tracker moves out the preset scope; 117 command is for alarm when tracker moves in. When the tracker moves in or out, it will send an SMS alarm to the authorized phone number for SOS.	W*****,017,data W*****,117,data	data is the coordinates which include: Lower-left X, Lower-left Y, Upper-right X, Upper-right Y For example, 11404.0000,E,2232.0010,N,11505.1234,E,2333.5678,N Note: 1. Lower-left X,Y (longitude and latitude) should be smaller than Upper-right X,Y; 2. All longitudes and latitudes should be in ASCII format as follows:- Longitude: DDDMM.MMMM,E/W. 4 places of decimal. '0' is needed to be stuffed if no value available. Latitude: DDMM.MMMM,N/S. 4 places of decimal. '0' is needed to be stuffed if no value available; 3. Send W*****,017 or W*****,117 without data to disable this function.

#### Presetting by SMS for GPRS tracking

Set ID for MT08 by SMS	W*****,010,ID	Tracker ID must be less than 14 digits
Set APN by SMS	W*****,011,APN,APN	APN Name, APN Password If

	Name, APN Password	no password required, just insert APN name only; APN defaulted as 'CMNET'; APN name + password not over 39 characters.
Set IP Address and Port by SMS	W*****,012,IP, Port	IP: xxx.xxx.xxx.xxx Port: [1,65536]
Enable GPRS Function	W*****,013,X	X=0, close GPRS (default); X=1, enable TCP X=2, enable UDP
Set Time Interval for Sending GPRS Packet	W*****,014,XXXXX	XXXXX should be in five digitals and in unit of 10 seconds. XXXXX=00000, to disable this function; XXXXX=00001~65535, time interval for sending GPRS packet and in unit of 10 seconds.
Output Control	W*****,020,P,F	P=1, Out1 =2, Out2 =3, Out3 =4, Out4 =5, Out5 F=0, to disable the output =1, to enable the output
Output Control (Safe mode) This function is achievable when the speed is below 10km/h and GPS is available.	W*****,120,ABCDE	ABCDE represents Out1, Out2, Out3, Out4, Out5 respectively. If A or B or C or D or E, =0, to disable the output =1, to enable the output =2, to remain previous status
Set power saving mode when MT08 is still (In power saving mode, GPS stops working. GSM enters standby mode and stop sending out message until it is activated by an SMS or an incoming call)	W*****,026,XX	XX=00, to disable this function XX=01~99, to set this function. It is in unit of minute. Example: If XX=10, MT08 will enter power saving mode in 10 minutes

		after it is immobile.
Set phone number for wiretapping	W*****,030,T	T is the telephone number for wiretapping and max. 16 digits
Set time zone difference	W*****,032,T	T=0, to disable this function T=[1, 65535] to set time difference in minutes to GMT. Default value is GMT +, not necessary for those ahead of GMT. For example, either +120 or 120 is acceptable. -, required for those behind GMT. For example, -120.
Set character for SOS alert message	W*****,033,P,Char	Char P is the button number. P=1, 2, or 3. Char is the character in SOS message and max 32 characters
Set tracking by driving angle change function	W*****,036,Degree	Measured by Degree(s), Degree=0,disable this function; X=1-359, means set angle degree interval in this function.
Set tracking by distance function	W*****,045,X	Measured by Meter(s), X=0, disable this function; X=1—65535, means the distance interval in this function.
Set clear/reset odometer function	W*****,046	To clear and reset odometer information to zero.
Set function of receiving location physical address name via SMS	W*****,111	This function need support of the GPRS01 or SMS01 tracking platform, address SMS will be received in text format.
Get version and serial number	W*****,600	To get version and serial number of current firmware
Get IMEI No.	W*****,601	To get device IMEI No.
Reboot GPS and GSM Module	W*****,900###	### is the ending character.

Initialization To turn all the parameters / settings (except for the password) to factory default.	W*****,990,099###	### is the ending character.
Password Initialization	W888888,999,666	This command will reset the current password to factory default password 000000

## Appendix 3: Fuel Sensor Installation and Function

### 1. Installation instruction

#### 1.1 Installation flow chart:



#### 1.2 Operation procedures:

##### 1.2.1 Find the position

Generally installed in the middle of the fuel tank, to avoid the original fuel floater

##### 1.2.2 Clean the oil stain on the installation position

Clean the oil stain on the installation position

##### 1.2.3 Holing

Use hand-drill with a 42mm metal drill bit, connect the power supply and drill in the position (Note: please do not drill too fast, stop when it is about to drop, then use the screwdriver and sharp-nose plier to remove the attached metal scraps to prevent them dropping into the tank ).

**Special note: Make sure to open the fuel tank cap before drilling; it's better to drain away all diesel, if not, just make sure not too full in the tank.**

##### 1.2.4 Cleaning work

Use the grater to polish the rough selvedge;

Use a rope-tied magnet to adsorb the iron scraps.



### 1.3 Flange installation

1.3.1 Put the gasket under the flange and holing, then tighten with screws.

1.3.2 Put sealing ring

1.3.3 The sensor has two circle sealing rings, first fit the bigger ring and then the small one, fix them on the top of the sensor, see the flow chart.

1.3.4 Screw tighten the sensor

1.3.5 Put the sensor into the flange opening, and screw tighten along the screw thread direction, then wiring and wrapping.

1.3.6 Power supply of the fuel sensor

The sensor power voltage is 18-32VDC. Note: Do not connect the biggest power line in the vehicle, please connect the normal size power line, otherwise will burn the sensor.

### 1.4 Tools required

Tools: Hand-drill, Metal hole saw, Hex tapping screws (3cm)



**Pistol Drill**

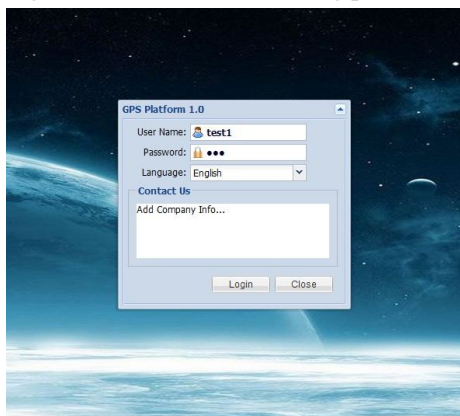
**Hole saw**

**Hexagon self tapping screw**

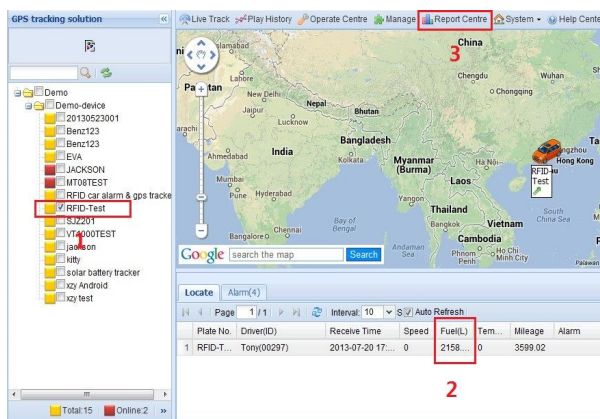
Extension cable of Fuel sensor: it's better wiring along the fuel tank, generally for a big vehicle, 9~10 m cable is enough and 5~8 m for a small vehicle; choose the 3-core, 0.75mm<sup>2</sup> cable.

## 2 Fuel Sensor on the platform applications

2.1 Into our GPS Tracking Platform: <http://www.global-track.net>, as following picture P1, login interface, (as following picture P2)



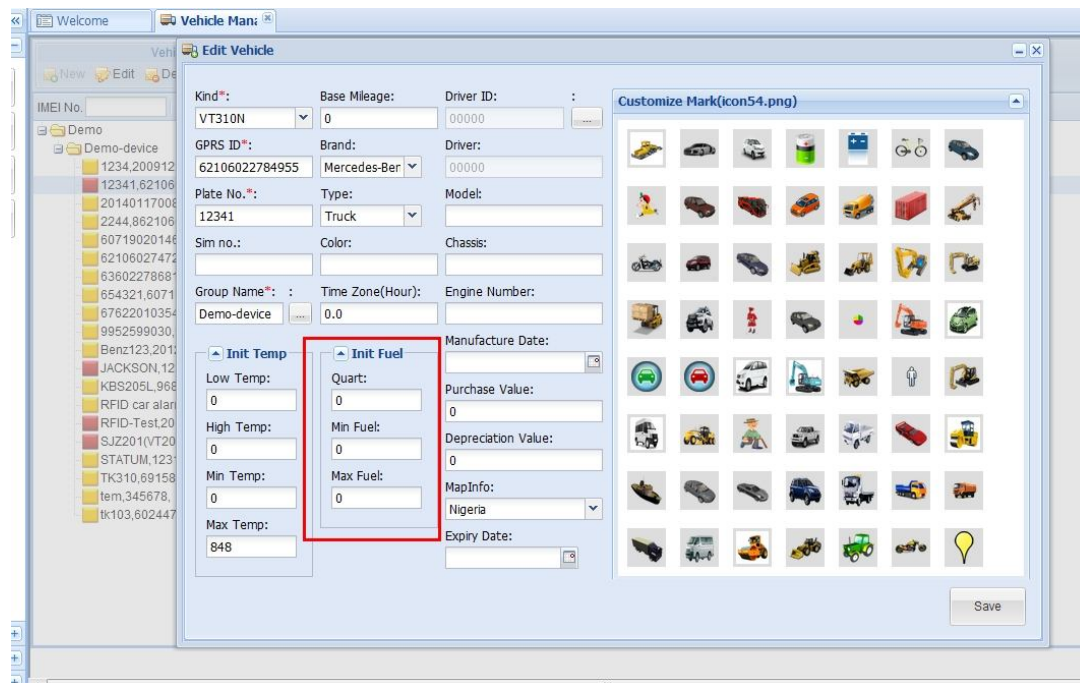
**P1 P2**



**P2**

## 2.2 Register on platform

### 2.2.1 Don't write anything in "Init Fuel", like follow picture 1:

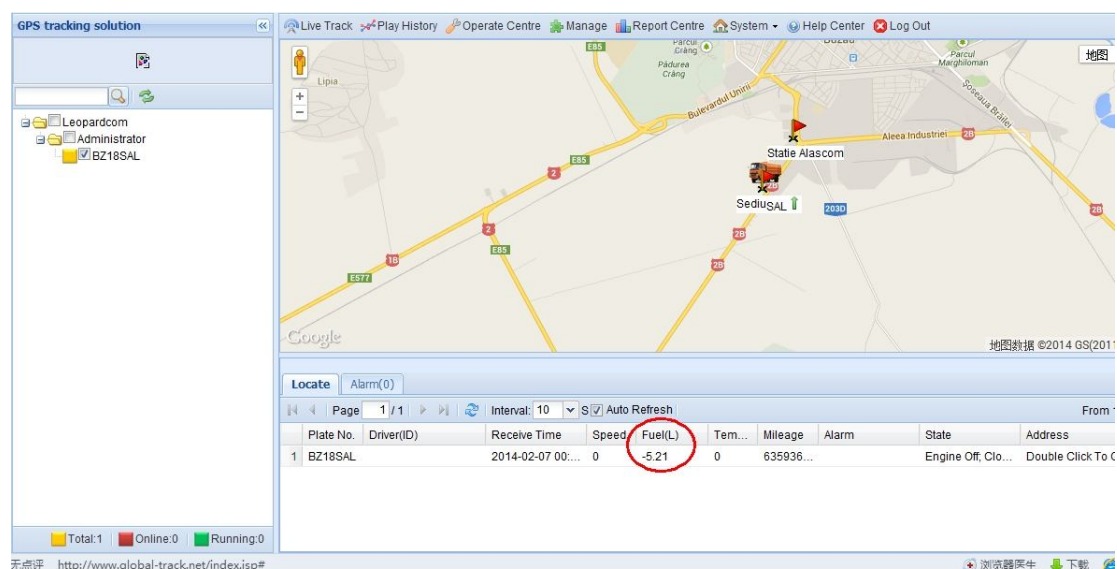


Picture 1

### 2.2.2. Like picture 2

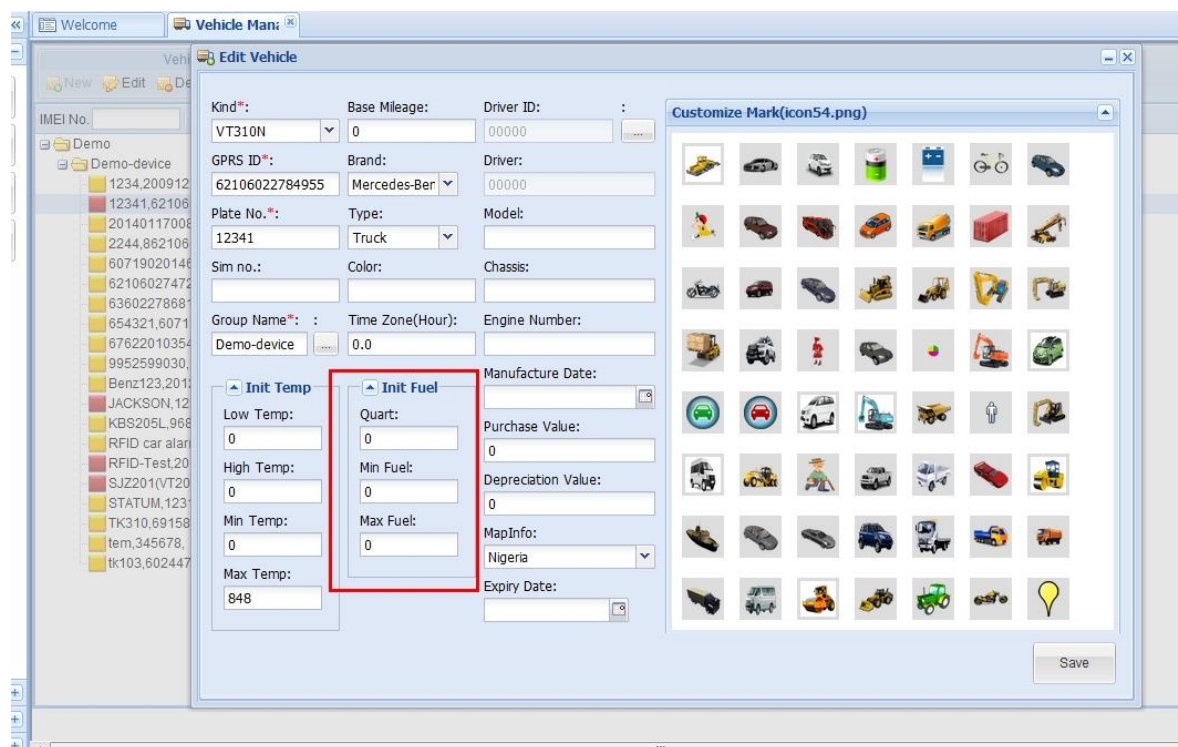
(1) Fill it up with fuel/oil in fuel tank. Let the tracker working. Then track the fuel(L) on platform:  
For example: the fuel(L) display: 603, this is Max Fuel, please write into "Max Fuel".

(2) Empty the fuel/oil in fuel tank. Let the tracker working. Then track the fuel(L) on platform:  
For example: the fuel(L) display: 0, this is Min Fuel, please write into "Min Fuel".



Picture 2

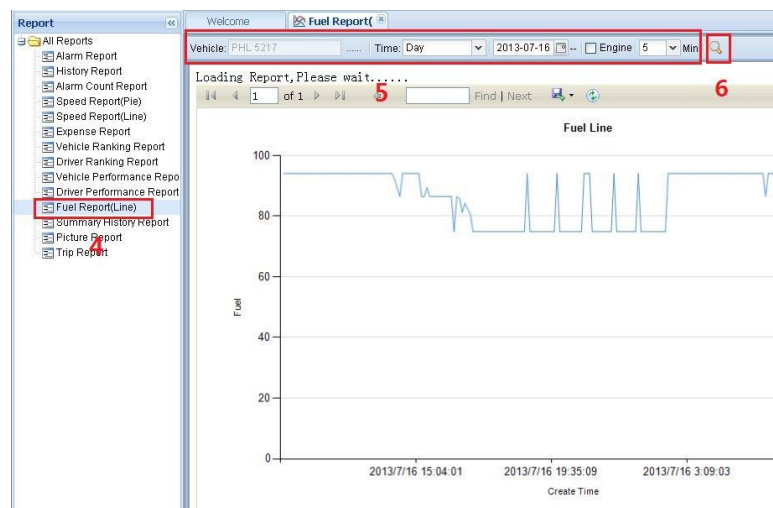
3. Write the vehicle's fuel tank capacity into "Quart"



4. Click "Save". Finish.

2.3 Select your device, such as instructed 1; it will display your car's the current oil/Fuel (L) (instructed2).

2.4 If you want to see the history record chart. Please click "Report Centre"(instructed 3), then the Report interface will pop up; (following picture P3)



P3

2.5 In Report options, there is a Fuel Report (Line), click it (instructed 4), then it will display instructed 5, 6; you need choose “vehicle, Time or data etc.”, and click search (instructed 6), later it will display “Fuel Line” chart.

You also can check History Report:

Report

Vehicle: T926CLP mobile 5 Time: Interval 2014-02-11 00:00:00 -- 2014-02-12 00:00:00

Loading Report, Please wait.....

1 of 62 Find | Next

### History Report

Plate	Create Time	Latitude	Longitude	Speed	Direction	Fuel	Mileage	Alarm Text	Status Text
T926CLP mobile 5	2014/2/11 0:00:10	-6.72284	39.21273	0	East	57.10	7225.54		Engine Off; Close;
T926CLP mobile 5	2014/2/11 0:00:40	-6.72284	39.21273	0	East	56.70	7225.54		Engine Off; Close;
T926CLP mobile 5	2014/2/11 0:01:10	-6.72284	39.21273	0	East	56.80	7225.54		Engine Off; Close;
T926CLP mobile 5	2014/2/11 0:01:40	-6.72284	39.21273	0	East	56.80	7225.54		Engine Off; Close;
T926CLP mobile 5	2014/2/11 0:02:10	-6.72284	39.21273	0	East	56.80	7225.54		Engine Off; Close;
T926CLP mobile 5	2014/2/11 0:02:40	-6.72284	39.21273	0	East	56.70	7225.54		Engine Off; Close;
T926CLP mobile 5	2014/2/11 0:03:10	-6.72284	39.21273	0	East	56.80	7225.54		Engine Off; Close;
T926CLP mobile 5	2014/2/11 0:03:40	-6.72284	39.21273	0	East	56.80	7225.54		Engine Off; Close;
T926CLP mobile 5	2014/2/11 0:04:10	-6.72284	39.21273	0	East	56.90	7225.54		Engine Off; Close;
T926CLP mobile 5	2014/2/11 0:04:40	-6.72284	39.21273	0	East	56.80	7225.54		Engine Off; Close;
T926CLP mobile 5	2014/2/11 0:05:10	-6.72284	39.21273	0	East	56.80	7225.54		Engine Off; Close;
T926CLP mobile 5	2014/2/11 0:05:40	-6.72284	39.21273	0	East	56.80	7225.54		Engine Off; Close;